

**FINAL
ENVIRONMENTAL ASSESSMENT
FOR THE SATELLITE
OPERATIONS SUPPORT FACILITY
ON
CAPE CANAVERAL AIR FORCE STATION,
FLORIDA**



FEBRUARY 2006

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FINDING OF NO SIGNIFICANT IMPACT
CONSTRUCTION OF THE SATELLITE OPERATIONS SUPPORT FACILITY
Cape Canaveral Air Force Station, Florida
February 2006

Pursuant to the Council on Environmental Quality regulations, the provisions of the *National Environmental Policy Act of 1969* (40 CFR Parts 1500-1508) and *Environmental Impact Analysis Process* (32 CFR Part 989), the United States Air Force (USAF) conducted an Environmental Assessment (EA), hereby incorporated by reference, of the potential environmental consequences and of constructing a Satellite Operations Support Facility (SOSF) and the no action alternative.

The Proposed Action is to build a permanent, 25,500 square foot technical operations support facility that would hold approximately 180 USAF and Department of Defense (DoD) contractor personnel who will support satellite programs assigned to the 45th Space Wing and each program's respective expendable booster. Close working proximity to satellite processing facilities is essential to enable personnel to effectively perform these functions for satellite payloads prior to their encapsulation and delivery to the launch vehicle. The proposed location would be selected to minimize hazard to personnel, as well as allow walking distance access by operations personnel to reduce lost time during each processing flow shift.

The site selection and building criteria for the proposed facility requires the facility to be located near existing satellite processing facilities, but outside explosive Quantity Distance clear zones. One alternate location was considered for the construction of the SOSF. The alternate site location evaluated was in an area approximately 400' to the east of the Proposed Action area; however, safety concerns associated with personnel crossing busy road to access the parking lot prevents construction at this site. Additionally, several lines of sight from radar and camera sites to Launch Complex 36 run through this area, which precludes construction at this site as well. Therefore, this alternative is not considered viable, and was eliminated from further consideration.

Under the no action alternative, personnel supporting Geo-Stationary Satellite (GSS) IIF and Space Based Infrared System (SBIRS) satellite processing will continue to operate in temporary facilities at scattered locations necessitating lengthy travel time and processing delays. Contractors have been forced to work overtime shifts to meet launch deadlines due to these inefficiencies. Work delays increase government expenditures as the costs are accounted for by USAF and DoD contractors. Under this alternative, the AF would be forced into an expensive short-term solution to lease or purchase another modular facility at a cost of approximately \$900,000 and replace the existing modular facility at an additional cost of \$900,000.

Environmental Consequences and Benefits

No significant environmental impacts were identified that would require the completion of an Environmental Impact Statement. However, some less than significant and beneficial impacts were identified and are summarized below.

Air Quality

CCAFS is located in an area that is in attainment for all criteria air pollutants; therefore, a conformity determination is not required. However, air emissions generated from vehicle use and welding and soldering operations as a result of Proposed Action activities were considered. Changes in local air quality resulting from these sources would not be significant.

Biological Resources

Native habitat currently exists on the proposed site of construction. The construction of the facility will require the permanent removal of approximately 0.6 acres of overgrown oak scrub habitat, and the potential to impact the federally threatened Florida Scrub-Jay, Eastern Indigo Snake, and Southeastern Beach Mouse, and the state-listed species of special concern, the Gopher Tortoise. The 45 SW completed Section 7 Consultation with the U.S. Fish and Wildlife Service (FWS) and will compensate for loss of scrub through restoration of 0.72 acres in the area where the modular building will be removed. The FWS concurs with the AF that the proposed project is not likely to adversely affect the above listed species. In addition to compensation, clearing of vegetation will not be authorized during the scrub jay nesting season. The presence of the new facility will not impose stricter burn restrictions since the facility's purpose is administrative only.

Three federally protected sea turtles nest on the CCAFS beach. Research has shown that females will avoid highly illuminated beaches and postpone nesting attempts. Artificial lights have also resulted in hatching mortality as disoriented hatchlings move toward these light sources rather than the ocean. To reduce impacts to nesting and hatchling sea turtles, all exterior lighting proposed for the facility will be installed and operated in accordance with the 45 SW Instruction 32-7001. In addition, a Light Management Plan will be required for the facility.

Adverse impacts to Eastern Indigo Snakes that may be present will be minimized by providing the project manager, as well as construction personnel the 45 SW Indigo Snake Protection/Education Plan. An education sign will be posted on site, informing personnel of the snake's appearance, protected status and who to contact if any are spotted in the area. Any Indigo snakes encountered during clearing activities will be allowed to safely leave the area on their own and any indigo encountered during gopher tortoise excavation will be safely moved out of the project area.

Impacts to beach mice are expected to be negligible since no borrows were observed at the site.

Any Gopher Tortoise burrows located in the project will be excavated and tortoises moved safely out of the project area.

Geology, Soil and Water Resources

Prior to and during construction and land clearing activities, erosion and sediment control measures would be designed and implemented to retain sediment on-site and prevent violations of State and Federal water quality standards. Any erosion or shoaling that could cause adverse impacts to water resources would be mitigated by implementing Best Management Practices (BMPs) established by the Florida Division of Forestry, and where applicable, BMPs required by water quality certifications and NPDES permits. The Proposed Action Area has been determined to be outside of the 500-year and 100-year flood plain. No wetlands are located on the Proposed Action area.

Hazardous Materials and Hazardous Waste

The proposed activities may require/generate small quantities of hazardous materials/wastes. All wastes generated by the contractor will be managed in accordance with all Federal, state, local and installation regulations and directives. The contractor will be responsible for sampling all wastes to determine whether they are hazardous or non-hazardous.

No Installation Restoration Program (IRP) sites have been identified in the Proposed Action area.

Infrastructure and Transportation

There is no Sanitary Sewer System near the site. A new sewer line will be constructed to the site to support the new SOSF. The nearest connection point is a manhole approximately 250 meters from the site. A new lift station will also be required.

At parking areas and walkways, low-pressure sodium light sources will be used that are controlled by combination time clock/photo cells. Exterior lighting would be in compliance with the 45SW Instruction 32-7001 "Exterior Lighting Management" dated 1 April 2003. Landscaping will be provided that is low maintenance and uses only approved plant material that is identified in the Facilities Excellence Plan. If required, the landscape design would utilize a water-conserving underground irrigation system.

Noise

Noise impacts from the operation of construction equipment are usually limited to a distance of 1,000 feet or less. Vehicles associated with the Proposed Action typically have a dBA between 65 and 100, at a distance of 50 feet (USEPA, 1971). There are no sensitive receptors (e.g., schools, hospitals) in the vicinity of the Proposed Action area. All work activities would be confined to daylight hours to avoid nuisance noise in the evenings.

In accordance with 29 CFR 1910, protection against the effects of noise exposure would be provided. When employees are subjected to unacceptable sound levels, feasible administrative or engineering controls would be utilized. If such controls do not reduce sound levels to acceptable levels, hearing protection would be provided and used to reduce exposure.

Socioeconomics

Under the Proposed Action, it is anticipated that the AF would be realize a cost-savings of \$1.8 Million from the elimination of short-term leases and the replacement of the existing modular facility.

Cumulative Impacts

Cumulative adverse impacts were identified as having the potential to occur for one resource area, Biological Resources. Three projects were identified within the vicinity of the Proposed Action that would result in adverse effects on state and federally listed species as a result of loss of habitat. Through the Section 7 consultation process with USFWS, it was determined that cumulative impacts did not apply in those instances. For this project, the cumulative effect will be a small net gain of scrub habitat. Therefore, cumulative effects are not anticipated to occur when the Proposed Action is combined with other past, present, and reasonably foreseeable activities.

Alternatives Considered Including the No Action Alternative

Under the no action alternative, 45SW personnel would continue to support mission requirements; however, operate in temporary facilities at scattered locations necessitating lengthy travel time and processing delays. Contractors have been forced to work overtime shifts to meet launch deadlines due to these inefficiencies. Work delays increase government expenditures as the costs are accounted for by AF and DoD contractors. Selection of the no action alternative is not considered a viable option because under this alternative, the AF would be forced into costly short-term solutions to provide adequate office space.

Conclusion

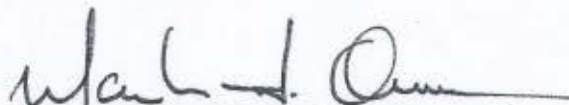
The Draft EA and FONSI were sent to the State Clearinghouse for review by the Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Department of State, East Central Florida Regional Planning Council, Treasure Coast Regional Planning Council, South Florida Water Management District, and St. John's River Water Management District. The FDEP deemed the proposed action to be consistent with the Florida Coastal Management Plan. All other agencies had no comments and/or stated that the proposed action is consistent with their relevant goals, policies, and objectives. Copies of all comments are located in the EA. The USFWS also reviewed the EA and FONSI and found that the proposed action is not likely to adversely affect resources protected by the Endangered Species Act.

Finding of No Significant Impact

In accordance with the Council on Environmental Quality Regulations implementing the National Environmental Policy Act of 1969 (Public Law 91-190, 42 U.S.C. §§4321-4347), as amended, and 32 CFR 989, 15 Jul 1999, and amended 28 Mar 2001, an assessment of the identified environmental effects has been prepared for the proposed construction of a SOSF on CCAFS, Florida. I find that the action will have no significant impact on the quality of the human environment; thus, an Environmental Impact Statement is not warranted.

20 April 2006

Date



MARK H. OWEN
Brigadier General, USAF
Commander

Acronyms and Abbreviations

AF	Air Force
AFI	Air Force Instruction
AP	Affirmative Procurement
BMPs	Best Management Practices
CCAFS	Cape Canaveral Air Force Station
CES	Civil Engineering Squadron
CEQ	Council on Environmental Quality
CEV	CCAFS Environmental Flight
CFR	Code of Federal Regulations
CO	Carbon Monoxides
DoD	Department of Defense
DPF	DSCS Processing Facility
DSCS	Defense Satellite Communication System
EA	Environmental Assessment
EELV	Evolved Expendable Launch Vehicle
EIAP	Environmental Impact Analysis Process
EO	Executive Order
EPA	Environmental Protection Agency
ERP	Environmental Resources Permit
ESA	Endangered Species Act
FDEP	Florida Department of Environmental Protection
FWCC	Fish and Wildlife Conservation Commission
FY	Fiscal Year
GPS	Global Positioning System
GSS	Geo-Stationary Satellite
INRMP	Integrated Natural Resource Management Plan
IRP	Installation Restoration Program
ITL	Integrated Transfer Launch
J-BOSC	Joint-Base Operations Support Contract
KSC	Kennedy Space Center
LMPs	Light Management Plans

NAVSTAR	Navigation Satellite Timing and Range
NEPA	National Environmental Policy Act
NPF	NAVSTAR Processing Facility
NHPA	National Historic Preservation Act
NOx	Nitrogen Oxides
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
ODS	Ozone Depleting Substances
OPLAN	Operational/Operations Plan
PEA	Programmatic Environmental Assessment
PM	Particulate Matter
QD	Quality/Distance
RCRA	Resource Conservation and Recovery Act
SBIRS	Space Based Infra-red System
SPIF	Satellite Processing and Integration Facility
SMTS	Space Missile Tracking System
SO ₂	Sulfur Dioxide
SOSF	Satellite Operations Support Facility
SSC	Species of Special Concern
45SW	45 th Space Wing
SWI	Space Wing Instruction
T&E	Threatened and Endangered
URTD	Upper Respiratory Track Disease
USFWS	Fish and Wildlife Services

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1.0 INTRODUCTION

1.1 Background

Cape Canaveral Air Force Station (CCAFS) is one of only two Air Force (AF)/Department of Defense (DoD) installations mandated with the mission of providing access to space for military spacecraft programs. The primary spacecraft processing facilities supporting this mission include the Satellite Processing and Integration Facility (SPIF), located in the Integrated Transfer Launch (ITL) area; the Navigation Satellite Timing and Range (NAVSTAR); NAVSTAR Processing Facility (NPF); and the Defense Satellite Communication System (DSCS) and DSCS Processing Facility (DPF), both located in Area 59 south of the CCAFS Skid Strip. These primary facilities support satellite-processing operations numbering between 8 to 12 payload flows per year. AF policy is to maximize off-pad processing in order to avoid very costly delays and refurbishment of satellite components while on the pad attached to their respective expendable boosters. Dispersal of key personnel has been repeatedly cited by internal 45th Space Wing (45SW) surveys as not complying with this AF policy. Personnel assigned to the hands-on processing of the spacecraft vehicles must travel up to 2.5 miles between the processing cells where the spacecraft are located and their respective temporary locations where data reduction, anomaly resolution, and other critical documentation functions must be performed. This separation creates greater non-productive time during a given processing flow, unnecessarily increasing the final cost of bringing a DoD satellite system to launch integration phase.

1.2 Purpose and Need for the Proposed Action

The purpose of this project is to construct a permanent Satellite Operations Support Facility (SOSF) that will provide adequate space for processing and integration personnel for all DoD satellite programs assigned to the 45SW and each program's respective expendable booster. CCAFS has a requirement for a SOSF where data reduction, computer simulations and verifications, and anomaly resolutions can be performed in close proximity to payload facilities. The new operations facility would be sited as close to the primary Spacecraft Processing Area (Area 59) as permitted by AF Range Safety setback restrictions. The proposed location would be selected to minimize hazard to personnel, as well as allow walking distance access by operations personnel to reduce lost time during each processing flow shift.

This project is required to support existing and new satellite processing operations for Global Positioning System (GPS), IIA, IIR, IIF, DSCS II, Space Missile Tracking System (SMTS), the Space Based Infrared System (SBIRS), and future generations of military satellites. The AF has already consolidated satellite processing facilities within a vicinity known as the Satellite Processing

Area or Area 59. The recent trend toward launching smaller DoD satellites has made this, one of the busiest satellite processing areas in the world. Currently, technical personnel conduct business from multiple sites; some facilities are located as far away as three miles from Area 59. The separation of these facilities increases response times for contractor personnel, handicapping the need to support 60-day or less launch calls and increases chargeable costs to the government. During the Fiscal Year (FY) 02-03 period, 90 additional contractor and Air Force personnel needed space for the GPS IIF and SBIRS programs. The new programs overlapped with the ongoing programs, and facility requirements for satellite support personnel more than doubled. The new satellites will be launched on future Delta, Atlas, and Evolved Expendable Launch Vehicle (EELV) medium launch vehicles beyond the year 2010. No existing permanent facilities are available to support this critical long-term mission. Additionally, Range Safety will not allow permanent operations in the existing satellite processing facilities due to explosive Quantity/Distance (QD) criteria.

1.3 Scope of Programmatic Environmental Assessment

This Environmental Assessment (EA) has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations, *Environmental Impact Analysis Process*, as promulgated in Title 32 of the Code of Federal Regulations (CFR) Part 989, and DoD Directive 6050. The document evaluates the environmental consequences associated with general construction of the SOSF and the No Action Alternative.

Tiering of environmental documents refers to the process of addressing a broad, general program, policy, or proposal in an initial environmental document, and analyzing a narrower site-specific proposal, related to the initial program, plan, or policy in a subsequent, abbreviated environmental document. The concept of tiering was promulgated in the 1978 CEQ regulations; the preceding CEQ guidelines had not addressed the concept. The Council's intent in formalizing the tiering concept was to encourage agencies "to eliminate repetitive discussions and to focus on the actual issues ripe for decisions at each level of environmental review" (Federal Register, 1978).

Much of the information presented in this EA will be tiered from existing documentation, including the *Programmatic Environmental Assessment of Land Clearing Activities for Cape Canaveral Air Force Station, Patrick Air Force Base, Malabar Transmitter Annex, and Jonathan Dickinson Missile Tracking Annex* (2005). Information tiered from this EA primarily includes background information.

2.0 Description of Proposed Action and Alternatives

This Section describes the Proposed Action and the alternatives that were considered to accomplish the Proposed Action. The Proposed Action is to construct a permanent, two-story 25,500 square foot concrete block operations support facility with office space, secure conference area, data storage area, and communications room. The proposed location is just southwest of Facility 55893 at Area 59 (Figure 2-1) within the close proximity of the Satellite Processing Area on CCAFS. Three alternatives were initially considered for the Proposed Action.

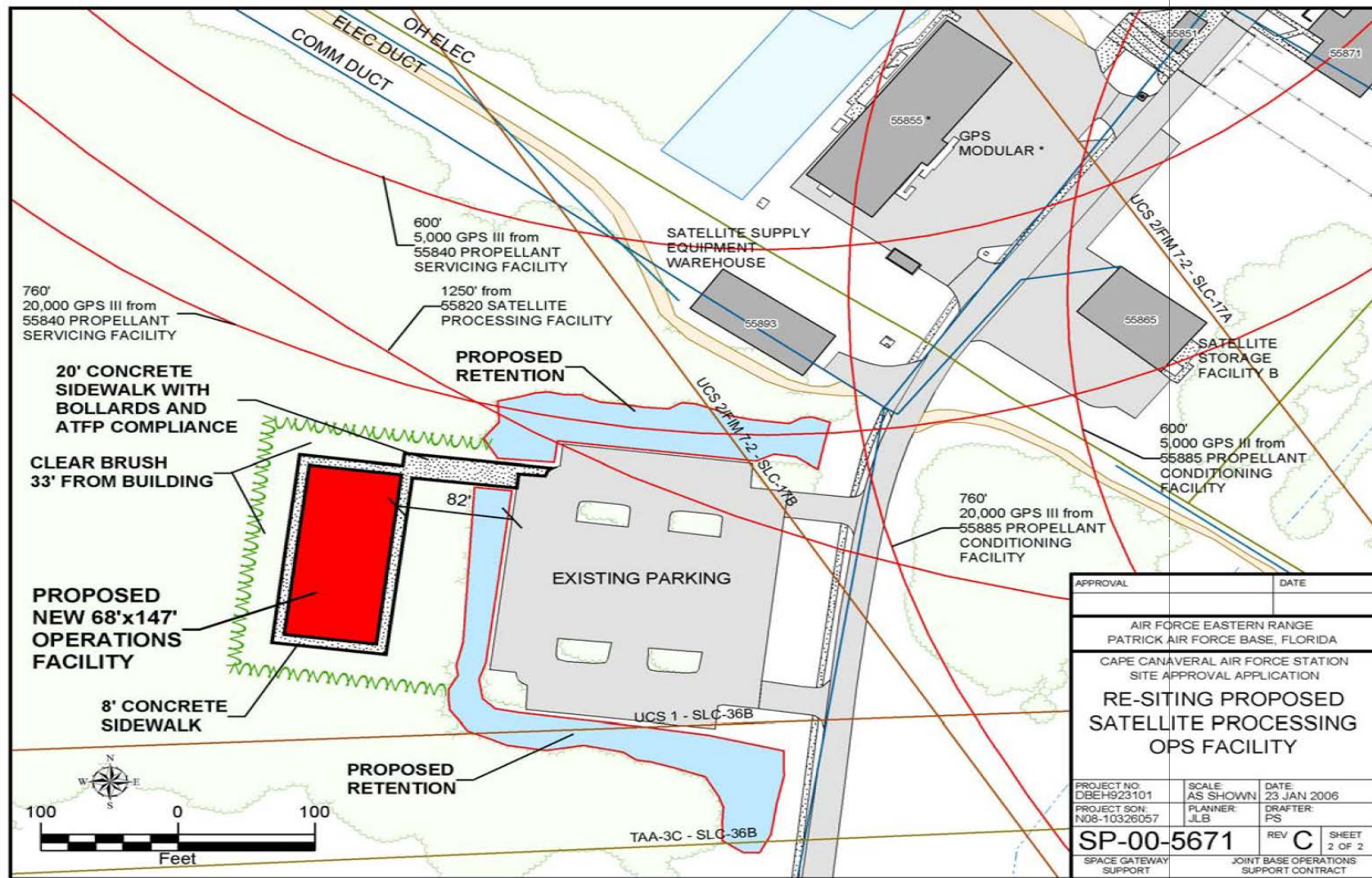
2.1 Proposed Action

The Proposed Action is to build a permanent technical operations support facility that would hold approximately 180 AF and DoD contractor personnel who will perform time critical data collection/reduction, anomaly resolution, computer simulation, technical data processing, quality control functions, logistic accounting, aerospace engineering, safety engineering, and security management of these multiple programs. Close working proximity to satellite processing facilities is essential to enable personnel to effectively perform these functions for satellite payloads prior to their encapsulation and delivery to the launch vehicle.

It is estimated that the new building will be two stories in height and approximately 25,500 square feet. The facility will consist of a reinforced concrete foundation; floor slab concrete masonry exterior walls with appropriate window areas. It includes administrative, lobby, conference/briefing, mechanical, electrical spaces, kitchenette, women's and men's restrooms on each floor, training areas, reproduction and graphics areas, corridors, and general storage space. The Proposed Action includes all the necessary utilities, mechanical and electrical systems, communications and fire detection/alarm system, pavements and access roads. The Proposed Action is not suited for testing or launch capabilities. Only administrative duties such as time critical data collection/reduction, anomaly resolution, computer simulation, technical data processing, quality control functions, logistic accounting, aerospace engineering, safety engineering and security management will be completed at the facility. Figure 2-2 illustrates the proposed layout of the facility.

The Proposed Action also includes the dismantling and removal of one modular building located southeast of the Proposed Action area.

The proposed location would occupy the western edge of an existing parking lot, and require the removal of approximately 0.6 acres of scrub habitat (Figure 2-3). The existing stormwater swale will be enlarged to accommodate stormwater from the facility. The existing parking lot would be adequate for parking needs.



* SOSF WILL REPLACE THE MODULAR AFTER COMPLETION

FIGURE 2-1: PROPOSED SOSF SITE

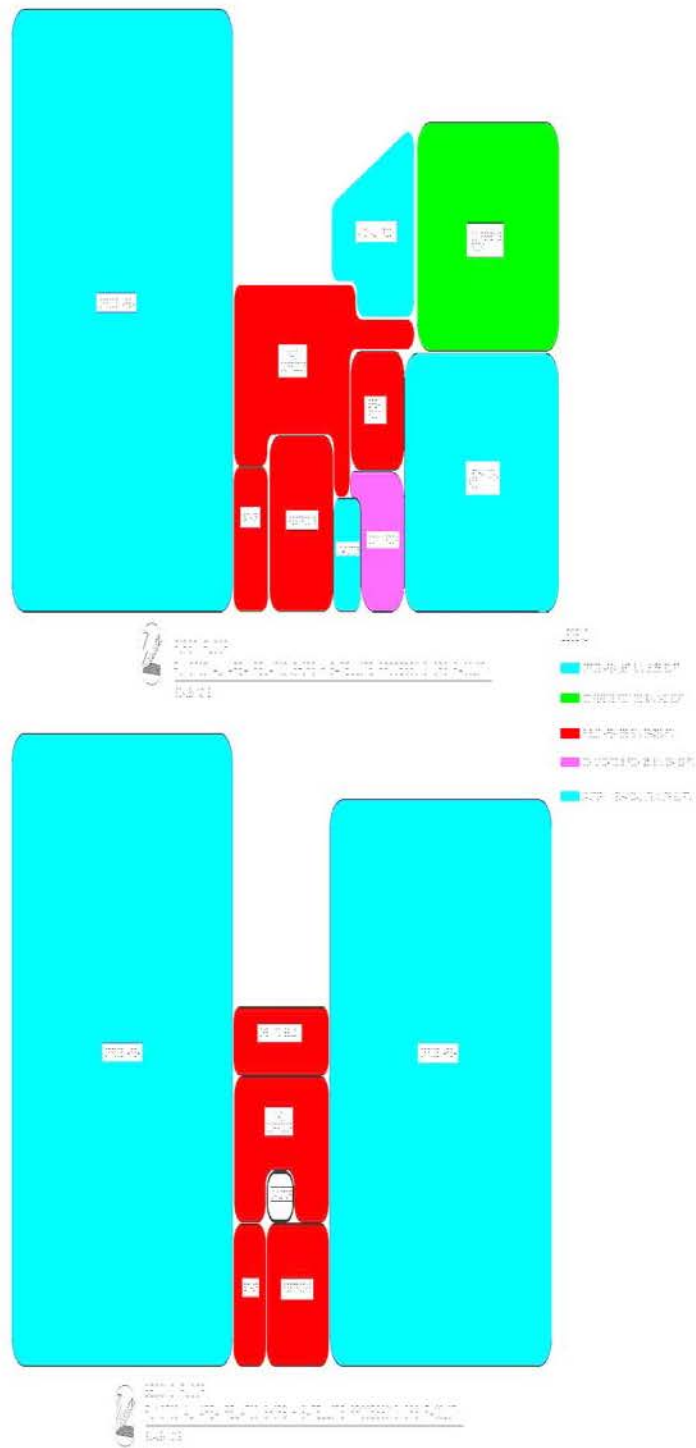


FIGURE 2-2: PROPOSED FLOORING SCHEMATIC FOR SOSF



FIGURE 2-3: SCRUB HABITAT ON PROPOSED LOCATION

2.2 Alternatives Eliminated from Further Consideration

One other construction site alternative was considered to the Proposed Action location. The site selection and building criteria for the proposed facility required the facility to be located near existing satellite processing facilities, but outside explosive QD clear zones. An alternate site location was evaluated in an area approximately 400' to the east of the Proposed Action area; however, safety concerns associated with personnel crossing a busy road to access the parking lot prevents construction at this site. Additionally, several lines of sight from radar and camera sites to Launch Complex 36 run through this area, which precludes construction at this site as well. Therefore, this alternative was not considered viable, and was eliminated from further consideration.

2.3 No Action Alternative

The only retained alternative to the Proposed Action was the No Action Alternative. Under the No Action Alternative, personnel supporting Geo-Stationary Satellite (GSS) IIF and SBIRS satellite processing will continue to operate in temporary facilities at scattered locations necessitating lengthy travel time and processing delays. Contractors have been forced to work overtime shifts to meet launch deadlines due to these inefficiencies. Work delays increase government expenditures as the costs are accounted for by AF and DoD contractors. Under this alternative, the AF would be forced into an expensive short-term solution to lease or purchase another modular facility at a cost of

approximately \$900,000 and replace the existing modular facility at an additional cost of \$900,000.

2.4 Potential Environmental Issues

Ten broad environmental components were initially considered to provide a context for understanding the potential effects of the Proposed Action and No Action Alternatives and as a basis for assessing the significance of potential impacts. The areas of environmental consideration were air quality; biological resources; cultural resources; geology, soil, and water resources; hazardous materials and waste; health and safety; infrastructure and transportation; land use and zoning; noise; and socioeconomics.

The 45SW performed a preliminary environmental analysis of the Proposed Action as documented on the AF Form 813, *Request for Environmental Impact Analysis* (Appendix A). The results of the analysis performed in this EA concurs that no impacts, or less than significant impacts, would be anticipated to air quality; cultural resources; geology, soils, and water resources; infrastructure and transportation; noise; and socioeconomics.

However, potential impacts from the implementation of the Proposed Action have been identified for biological resources. A more detailed analysis of impacts to biological resources is presented in Chapter 4.0.

2.4.1 Potential Impacts from the Proposed Action

Biological Impacts

Native habitat currently exists on the proposed site of construction. The construction of the facility will require the permanent removal of approximately 0.6 acres of overgrown oak scrub habitat, and a potential impact to the federally threatened species Florida Scrub Jay (*Aphelocoma coerulescens*), Eastern Indigo Snake (*Drymarchon corais couperi*), Southeastern Beach Mouse (*Peromyscus polionotus niveiventris*), and the state-listed Species of Special Concern (SSC), the Gopher Tortoise (*Gopherus polyphemus*). As compensation for loss of this habitat, the AF has proposed to restore 0.72 acres in the area where the modular is proposed to be removed. In addition, clearing activities associated with this project may be restricted to those months outside the scrub-jay nesting season (1 March – 30 June).

In accordance with Section 7 of the Endangered Species Act, the AF has initiated consultation with the U. S. Fish and Wildlife Service (USFWS). However, this consultation was based on a previous site plan that placed the facility in the northwest corner of the parking lot. Because new QD Arcs were established for Area 59 on CCAFS, the site plan was slightly changed. New consultation is not required for the minor change in location because the footprint of the building remains the same and the amount and type of acreage to be impacted is

identical. In addition, the enlargement of the stormwater system will not require any additional habitat to be removed.

2.4.2 Issues Eliminated from Detailed Analysis

Following a preliminary analysis, the USAF determined that no impacts or less than significant impacts would be anticipated to air quality; cultural resources; geology, soils, and water resources; hazardous materials/waste; infrastructure and transportation; noise; and socioeconomics. The following is a summary of the potential minor impacts for these categories.

2.4.2.1 Air Quality

Air Force Instruction (AFI) 32-7040, *Air Quality*, identifies AF requirements for an air quality compliance program. Other applicable air quality requirements are identified below:

Law or Rule	Permit/Action(s)	Requirement	Agency or Organization
AFI 32-7086, Chapter 4	Minimize loss and conduct recovery, recycling, and reuse of ozone depleting substances (ODS) to the maximum extent practicable.	Manage to minimize releases of ODSs into the environment.	AF
AFI 32-7040	Estimate air emissions for inclusion in the Air Emissions Inventory	Track vehicle/equipment use and welding/soldering activities.	AF

CCAFS is located in an area that is in attainment for all criteria air pollutants; therefore, a conformity determination is not required. However, several sources of air emissions were considered that could result from implementation of the Proposed Action. Changes in local air quality resulting from these sources would not be significant. Each potential source of air pollution is reviewed below.

Vehicle Use

Vehicles would emit exhaust (carbon monoxide (CO), nitrogen oxides (NO_x), and sulfur dioxide (SO₂) during project activities. Dust particles (*i.e.*, particulate matter (PM)) would also be suspended during construction activities. The current Title V Air Operating Permit would not need to be amended, as the impacts associated with the Proposed Action would be minor and are covered by the existing permits. Dust suppression techniques, such as periodic site watering would be used.

Welding and Soldering

Small welding and soldering operations were previously exempt from air permitting requirements. However, new Title V requirements require the AF to track and quantify air emissions from previously un-permitted sources. New welding and soldering operations and changes in operations must be coordinated with the 45 Civil Engineering Squadron, Environmental Flight, (45 CES/CEV) office. Estimates of hourly and annual use of materials and a short process description must be submitted to 45 CES/Environmental Flight, Conservation, and Planning Element (45 CES/CEVP).

Mechanical Systems

A boiler is proposed for use in the operation of the SOSF. If the natural gas boiler is less than 10 million BTUs, no permit is required. However, if the boiler exceeds 10 million BTUs, a construction permit will be required under the CCAFS Title V permit.

2.4.2.2 Cultural Resources

Cultural resources include prehistoric-archaeological, historic, architectural, and Native American resources. Areas of potential impact include properties, structures, landscapes, or traditional cultural sites that qualify for listing in the National Register of Historic Places (NRHP). Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) requires federal agencies to consider the effects of their actions on historic properties. AFI 32-7065, *Cultural Resources Management*, provides guidelines for the protection and management of cultural resources on AF-managed lands.

No impacts to cultural resources are anticipated from the Proposed Action or the No Action Alternative. However, to survey, despite an intense effort and excellent research sampling strategy, precludes the possibility that an archaeological site may be discovered during subsequent clearing activities. Federal cultural resource preservation statutes (including the Native American Graves Protection and Repatriation Act) mandate that should artifacts become apparent during construction or clearing, such materials should be identified and evaluated by an archaeologist. Should human remains be encountered, federal statutes specify that work shall cease immediately and the proper authorities be notified. (Federal Register, Rules and Regulations, Dec. 4, 1995, Vol. 60, No. 232:62161, Section 10.5).

2.4.2.3 Geology, Soils, and Water Resources

AFI 32-7041, *Water Quality Compliance*, identifies essential AF actions to achieve and maintain compliance with the Clean Water Act, and other applicable Federal, State, and local water quality standards. It requires adherence to applicable State and local water quality standards when they are more stringent

than Federal standards. The following table identifies the requirements to ensure that there are no significant impacts to geology, soil, and water resources.

Law or Rule	Permit/Action(s)	Requirement	Agency or Organization
Clean Water Act (CWA)	Section 401 Water Quality Certification*	FDEP review of CWA Section 404 dredge and fill permit applications submitted to the U.S. Army Corps of Engineers (USACE) to certify that project will not cause or contribute to a violation of Florida water quality standards.	FDEP
CWA	Section 402 National Pollutant Discharge Elimination System (NPDES) storm water construction permit	Obtain permit for the discharge of storm water for projects disturbing one (1) acre or more that has the potential to impact surface waters, except when the silviculture exemption applies.	EPA; FDEP; South Florida Water Management District (SFWMD), St. John's River Water Management District (SJRWMD)
Safe Drinking Water Act	National Primary and Secondary Drinking Water Regulations	Maintain health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water	EPA; FDEP
Various*	Environmental Resource Permit*	Obtain permit for any activity that could affect wetlands, alter surface water flows, or contribute to water pollution.	FDEP, SJRWMD and SFWMD

Soils and Geology

The potential for erosion is highest during construction activities. To reduce the impacts of erosion, prior to and during construction, implementation of erosion and sediment control measures standard construction Best Management Practices (BMPs) would be used. These measures include the use of silt fences, mulch, siltation basins, and revegetation of disturbed areas to control erosion. Because the existing structures are located on relatively level terrain and only small areas of soil (*i.e.*, sand) would be disturbed, no significant impact to soils are anticipated, provided proper BMPs are implemented and monitored.

Prior to any digging, an Excavation Permit will be required. Excavation permits can be obtained through the Space Gateway Support (SGS) Mission Support Excavation Administrator at 861-4453. Additionally, an AF Form 103, BCE Work Clearance Request, will be required.

Spoil (excess soil) is not permitted to be disposed in vegetation. All staging of equipment and soil would be staged in coordination with the 45 CES/CEVP.

Water Resources

Water resources could potentially be affected by the Proposed Action activities if soil erosion occurs from land disturbance during construction. Prior to and during construction, all erosion and sediment control measures (BMPs) required to retain sediment on-site and to prevent violations of state water quality standards would be implemented. Any erosion or shoaling with the potential to cause adverse impacts to water resources would be corrected. Additionally, erosion and sediment control measures will be initiated, as soon as practicable, in disturbed portions of the site where construction activities have permanently ceased or are temporarily on hold for at least seven days.

Modifications to existing Environmental Resources, Potable Water and Domestic Wastewater Permits may be required if new permits are not deemed necessary. The 45 CES/CEV should be contacted for guidance.

The Proposed Action Area has been determined to be outside of the 500-year and 100-year flood plain (Figure 2-4). No wetlands are located on the Proposed Action area.

Projects creating 9,000 square feet or more of total impervious surface (the sum of building and parking area) will require an Environmental Resources Permit (ERP). In addition, an ERP would be required for the construction of the facility from SJRMWD. However, "jack and bore under" canals would be the preferred method, and would not require an ERP permit.

Coverage under the Florida Department of Environmental Protection (FDEP) Construction General Permit must be sought by the operator of a construction activity that:

- Will disturb one acre or greater, or
- Will disturb less than one acre but is part of a larger common plan of development or sale whose total land disturbing activities total 1 acre or greater (or is designated by the National Pollution Discharge Elimination System (NPDES) permitting authority); and
- Will discharge storm water runoff from the construction site into a municipal separate storm water sewer system (MS4) or waters of the United States.

A Notice of Intent for Storm Water Discharges Associated with Construction Activity under a NPDES General Permit will be required for the Proposed Action. When construction activities begin, the contractor is responsible for submitting a

Notice of Intent to FDEP. Furthermore, when all construction activities have been completed, a Notice of Termination must also be submitted.

There will be minor impacts to the existing stormwater conveyance system; however, the design will incorporate modifications as required.

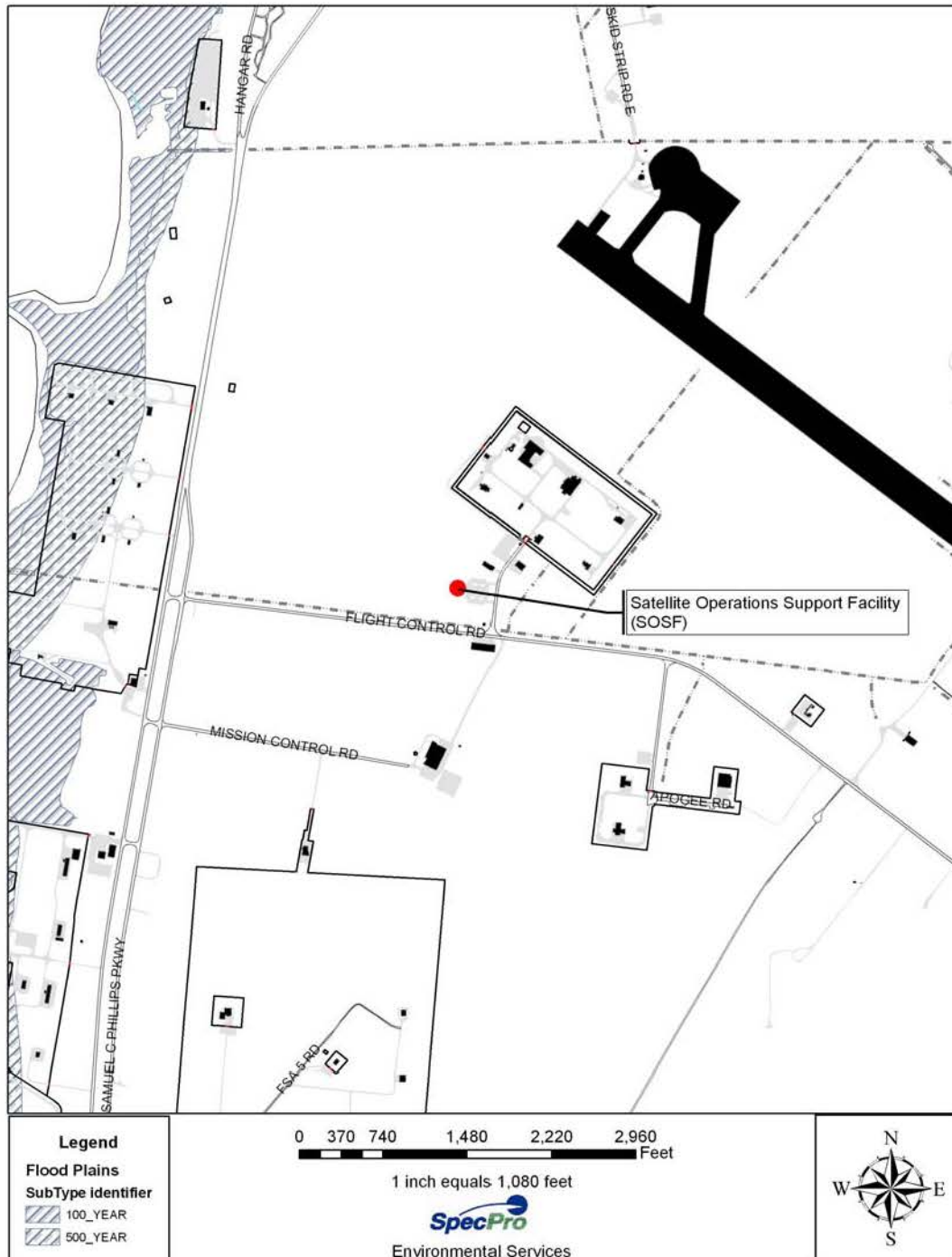


FIGURE 2-4: FLOOD PLAIN MAP FOR PROPOSED ACTION AREA

2.4.2.4 Hazardous Materials/Waste

The proposed activities may require/generate small quantities of hazardous materials/wastes. All wastes generated by the contractor will be managed in accordance with all Federal, state, local and installation regulations and directives. The contractor will be responsible for sampling all wastes to determine whether they are hazardous or non-hazardous. Results of laboratory analyses will be provided to the Contracting Officer. All containers utilized for management of wastes will be new and meet the Department of Transportation's performance-oriented packaging requirements. All containers will be labeled to accurately reflect the contents. All other requirements identified in Appendix F of Operational/Operations Plan (OPLAN) 19-14 would be met. The contractor will assume all liabilities for improper waste disposal. The responsibility for off-site disposal of solid non-hazardous waste also lies with the contractor. Management of hazardous waste would be completed in accordance with 40 CFR 260-279. All AF hazardous waste is to remain on the installation and will be shipped off-site by the Air Force under their Environmental Protection Agency (EPA) identification number.

No Installation Restoration Program (IRP) sites have been identified in the Proposed Action area.

2.4.2.5 Infrastructure and Transportation

Infrastructure and transportation includes utilities, solid waste management, and transportation networks. AFI 32-7042, *Solid and Hazardous Waste Compliance*, identifies compliance requirements for solid waste. A summary of requirements for infrastructure and transportation is identified in the Table below. Only minor impacts are anticipated to infrastructure and transportation from the Proposed Action.

Law or Rule	Permit/Action(s)	Requirement	Agency or Organization
Joint-Base Operations Support Contract Excavation/Dig Permit Procedure"	Utility Locate/Excavation Permit	Any excavation activity	Space Gateway Support Mission Support, Excavation Administrator

Solid Waste

Solid waste must be managed in accordance with the specifications set forth in the construction contract. The AF supports the recycling of construction materials to the largest extent possible. If the contractor were directed to dispose of construction materials in the CCAFS landfill, all requirements specified in the CCAFS Landfill Operations Plan would be met. The project contract monitor would make all arrangements with the landfill operator prior to any disposal activities, and would complete and sign a "Landfill Disposal Verification Form." No waste would be accepted prior to the completion of this form.

All contractors and subcontractors involved in the Proposed Action would comply with AF Affirmative Procurement (AP) requirements. AP is the purchase of environmentally friendly products and services (e.g., products made from recycled or recovered materials). The 45SW and its contractors are required, whenever practicable, to maximize the purchase of materials containing the minimum recycled or recovered materials content found on the list of "EPA Designated Guideline Items" found at <http://www.ofee.gov> in accordance with the Resource Conservation and Recovery Act (RCRA) 6002, and Executive Order 13101.

Prior to project closeout, the design engineer and construction contractor would generate a report that identifies the materials and quantities specified/used, or must provide justification as to why designated guideline items were not utilized. AP requirements must also take consideration of life-cycle costing, i.e., the cost of a product, including capital, installation, operations, maintenance, and disposal costs over the lifetime of the product.

Utilities

New Construction

Utility structures and lines would be identified prior to any excavation and a Joint-Base Operations Support Contract (J-BOSC) Excavation Permit would be obtained. Existing overhead electrical feed will be replaced with an underground system as part of this project. In addition, the existing 13.2kV primary electrical distribution system will be extended underground to the new facility location. A new pole and riser with arrestors and fused cutout switches will also be installed. If unidentified underground utilities were encountered during excavation, operations would cease until all utilities are properly identified.

There is a Sanitary Sewer force main located on the eastern side of the access road to NPF/DPF near the site. A new sewer line will be constructed to the site to support the new SOSF. For the Proposed facility, a sewer lift station connecting to this force main will need to be constructed and will require a permit to construct a sewer collection/transmission system from the FDEP domestic wastewater section.

Construction of a new potable water main will be required for the facility. If a single dedicated service main is provided to the facility, no permitting will be required through the FDEP Drinking Water Section. However, a water main distribution system consisting of two or more connections to the existing main or creating of a loop distribution system will require permitting through FDEP for the construction of an extension to the existing water main system.

A minimum-sized two-way, 4" concrete encased underground duct bank with #4/0 15kV EPR feeder will be constructed to deliver power to the SOSF. In addition, a pad mount, oil-filled three-phase stainless steel transformer will be

installed to provide low voltage for the premises electrical wiring and distribution systems.

At parking areas and walkways, low-pressure sodium light sources will be used that are controlled by combination time clock/photo cells. Exterior lighting would comply with the 45SW Instruction 32-7001 "Exterior Lighting Management" dated 1 April 2003. Landscaping will be provided that is low maintenance and uses only approved plant material that is identified in the Facilities Excellence Plan. If required, the landscape design would utilize a water-conserving underground irrigation system.

Removal of Modular Facility

The removal of the modular facility will require abandonment of the existing stormwater permit. Furthermore all existing utilities (e.g., sewer lift station and water connections) will need to be disconnected.

Transportation

The existing transportation systems would be used to access the site and no new roads would be constructed. Traffic may be temporarily delayed to allow construction vehicles to safely enter and exit to the work area and to slow the flow of traffic adjacent to active work zones. Modifications to the existing infrastructure and transportation system would not be anticipated.

2.4.2.6 Noise

The EPA administers the Noise Control Act of 1972, and has identified 65 dB (A-scale) as a desirable noise level for compatible land uses. This level is not regarded as a noise standard, but as a basis to set appropriate standards that should also factor in local considerations and issues.

Noise impacts from the operation of construction equipment are usually limited to a distance of 1,000 feet or less. Vehicles associated with the Proposed Action typically have a dBA between 65 and 100, at a distance of 50 feet (USEPA, 1971). There are no sensitive receptors (e.g., schools, hospitals) in the vicinity of the Proposed Action area. All work activities would be confined to daylight hours to avoid nuisance noise in the evenings.

In accordance with 29 CFR 1910, protection against the effects of noise exposure would be provided. When employees are subjected to sound levels, exceeding those listed in Table 2-1, feasible administrative or engineering controls would be utilized. If such controls do not reduce sound levels to the levels presented in Table 2-1, hearing protection would be provided and used to reduce exposure.

Table 2-1: Permissible Noise Exposures

Duration Per Day (Hours)	Slow Response Sound Level (dBA)
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
0.5	110
0.25 or less	115

2.4.2.7 Socioeconomics

Socioeconomics comprise such interrelated resources as population, employment, income, temporary living quarters (during construction activities), and public finance. It is anticipated that the Proposed Action will affect employment patterns on the basis that the new structure will house more employees. Under the Proposed Action, it is anticipated that the AF would realize a cost-savings of \$1.8 Million from the elimination of short-term leases and the replacement of the existing modular facility.

3.0 Affected Environment

In compliance with NEPA and CEQ guidelines, this Chapter describes the existing environment of the Proposed Action area for biological resources. All other environmental resources were eliminated from a detailed analysis. (Refer to Chapter 2.) This information serves as a baseline from which to identify and evaluate potential environmental changes resulting from implementation of the Proposed Action.

3.1 Biological Resources

The USAF is committed to the long-term management of all natural areas on its installations, as directed by AFI 32-7064, *Integrated Natural Resources Management*. Long-term management objectives are identified in the 45SW's *Integrated Natural Resources Management Plan* (INRMP) with specific land-management objectives identified in the Scrub Jay and Sea Turtle Management Plans located in the appendix of the INRMP. The following information was derived from several sources, including the 2001 INRMP, which is currently being updated.

Biological resources covered in this section include vegetation communities and special-status species. Special-status species include Federal and State species of special concern and threatened and endangered (T&E) species, and will specifically be addressed in this EA.

3.1.1 Vegetation

The scrub habitat is the primary vegetative community in the Proposed Action area. The vegetation and wildlife associated with this habitat are documented in detail in the 2005 Programmatic Environmental Assessment (PEA) for Land Clearing Activities. Oak scrub on CCAFS is generally overgrown, relatively homogeneous, and species depauperate.

One-half acre of overgrown scrub habitat would be cleared under the Proposed Action alternative for construction of the SOSF. Four species of oak typically characterize the oak scrub on CCAFS: live oak (*Quercus virginiana*), myrtle oak (*Q. myrtifolia*), sand live oak (*Q. geminata*), and Chapman's oak (*Q. chapmanii*). The presence of sand live oak and Chapman's oak is considered diagnostic for this community type on CCAFS. Sand pines, which are occasionally found in these communities, occurs in no other community on CCAFS and are also considered indicative of scrub. Florida hickory (*Carya floridana*) is also found in many scrub sites.

Saw palmetto is abundant in all oak scrub, forming a dense layer in many areas. Other shrub species found frequently in oak scrub are rusty lyonia (*Lyonia ferruginea*), wax myrtle, hog plum, and shiny blueberry (*Vaccinium myrsinites*).

The proposed site is located in burn compartment/land unit 68. Compartment 68 consists of 72 acres, of which 35 were cut and burn in 2003. Approximately 0.6 acres in the southeastern end of the compartment will be cleared to accommodate the proposed facility.

3.1.2 Wildlife

Various species of wildlife inhabit, utilize, and/or frequent CCAFS. CCAFS is located on a barrier island, a type of ecosystem that supports many species of plants and animals. A complete list of wildlife, including migratory birds, anticipated to occur on CCAFS can be found in the INRMP.

3.1.3 Threatened and Endangered Species and Species of Special Concern

CCAFS is home to several state and federally listed species. The site for the proposed facility provides habitat for the federally threatened Florida scrub jay, Eastern indigo snake and Southeastern beach mouse, as well as the state listed species of special concern, the gopher tortoise.

Florida Scrub Jay

The majority of scrub jay habitats are located on coastal barrier islands and excessively drained upland sand ridges. Developers also favor these areas. The U.S. Fish and Wildlife Service (USFWS) has determined CCAFS is a core scrub jay area and highly valuable to the recovery of the species. The habitat at CCAFS is unique because it is the only coastal barrier island with a scrub jay population. Scrub jay mitigation is often necessary for all proposed construction projects.

The proposed site is overgrown oak scrub with the closest jay group residing just to the west of the site. However, the USFWS considers CCAFS a very important scrub jay area and immensely important to the recovery of the species, regardless of the scrub condition.

The habitat required for the scrub jay greatly restricts the bird's distribution. Active management either through burning or mechanical clearing is necessary to maintain optimum conditions. In general, scrub jay habitat consists of dense thickets of scrub oaks less than nine feet tall, interspersed with bare sand used for foraging and storing of acorns.

In order to take a more retroactive approach to protecting the scrub jay, the AF developed CCAFS Scrub Habitat Compensation and Restoration Plans that can also be found in the CCAFS INRMP. Compensation for scrub jay habitat loss is typically based on an increasing ration of 4:1 (every acre lost requires compensation in the amount of four acres). Additionally, periodic controlled burning of Florida scrub jay habitat is conducted to mimic the natural ecological

cycle that includes seasonal brush fires to limit tree height and help maintain habitat make-up.

Gopher Tortoise

The gopher tortoise is listed as a Species of Special Concern in the State of Florida. Although the gopher tortoise is not federally protected in Florida, it is afforded protection by the AF due to its state ranking and the communal use of its burrow by other federally protected species (the Eastern indigo snake). The primary reason for the decline of this species throughout the southeast is habitat loss. Gopher tortoises are likely to occur within the proposed area.

The gopher tortoise is a relatively large (carapace length up to 1.2 feet) terrestrial turtle that is active year round but spends a limited amount of time above ground. The gopher tortoises occur in habitats with a well-drained sandy substrate, ample herbaceous vegetation for food, and sunlit areas for nesting. Gopher tortoises are highly fossorial, construct burrows that average 15 feet long, and 6 feet deep, where they spend much of their time in. The burrows provide protection from predators, fire, and the weather. The burrow is also an important habitat to scores of other native species. Some species observed utilizing burrows on CCAFS include the eastern diamondback rattlesnake, eastern coachwhip, ghost crabs, box turtle, cotton mouse, and armadillo.

Nesting occurs from late April to mid-July. Clutches, averaging five to six eggs, hatch from August through September. Nests may be located in any open sunny area near the burrow of the female, but are most often found in the spoil mound immediately outside the female's burrow. Adult females produce one clutch per year, with some adults not nesting every year.

Eastern Indigo Snake

The longest of the North American snakes (up to 8.6 feet), the Eastern indigo snake is locally abundant in parts of Florida, but as a top carnivore, population densities are typically low. The Eastern indigo snake has been found on CCAFS and likely occurs throughout the station. This primarily diurnal snake is known to occur in most types of habitat and is often associated with gopher tortoise burrows, which it occupies when inactive. The reproductive season encompasses copulation (November through April), egg laying (May through June), and hatching (late July through October). Major threats to the indigo snake on CCAFS are habitat loss and vehicle traffic. The Eastern indigo snake could occur within the proposed project area.

Southeastern Beach Mouse

The Southeastern beach mouse is a subspecies of the widely distributed beach mouse (*Peromyscus polionotus*). Originally occurring on coastal dunes and coastal strand communities along the Atlantic coast of Florida, the Southeastern beach mouse is presently known to occur in six sites in Brevard, Indian River,

and St. Lucie Counties. Most breeding activity occurs November through January, and females can produce two or more litters per year, with litters averaging 3 to 4 young. The extirpation of the Southeastern beach mouse from most of its historical range is a result of human development of the coastal barrier islands.

The most viable populations of this species of mouse are now present only at Canaveral National Seashore, Kennedy Space Center (KSC), and CCAFS. CCAFS is the only remaining unfragmented section of coastal dune and strand that still supports large numbers of the Southeastern beach mouse. The Southeastern beach mouse has been observed in coastal scrub on CCAFS. Recent surveys indicate that the Southeastern beach mouse could be present in and/or around the proposed site. Although no burrows were observed during site surveys, it is possible they could populate the area by the time construction begins.

Sea Turtles

Three species of federally protected sea turtles have been documented as nesting on CCAFS: the threatened loggerhead (*Caretta caretta*) and the endangered green (*Chelona mydas*) and leatherback (*Dermochelys coriacea*). While sea turtles spend much of their lives in the ocean, females come ashore each year to nest. Research has shown that females will avoid highly illuminated beaches and postpone nesting. Artificial lights have also resulted in hatchling mortality as disoriented hatchlings move toward these light sources rather than the ocean.

In 1988, in compliance with Section 7 of the Endangered Species Act, the U.S. Air Force developed Light Management Plans (LMPs) for various areas and facilities on CCAFS to protect sea turtles. A Biological Opinion issued by the USFWS on 9 April 1990, and updated on 2 May 2000, requires that all new facilities develop a LMP. In addition, the AF created 45th Space Wing Instruction (SWI) 32-7001, *Exterior Lighting Management*, which implements the Biological Opinion and explains management responsibilities necessary for the 45 SW to remain in compliance with the Biological Opinion.

4.0 Environmental Consequences

This Chapter describes the potential environmental impacts associated with the activities under the Proposed Action and the No Action Alternative.

Federal, State, and local environmental laws and regulations were reviewed to assist in determining established thresholds for assessing environmental impacts (if any) in fulfillment of NEPA requirements. Proposed activities were evaluated to determine their potential to result in significant environmental consequences using an approach based on the interpretation of significance outlined in the CEQ regulations for implementing the procedural provisions of NEPA (40 CFR 1500-1508) and 32 CFR 989, *The Environmental Impact Analysis Process* (2003).

Guidelines established by the CEQ (40 CFR 1508.27) specify that significance should be determined in relationship to both context and intensity (severity). The assessment of potential impacts and the determination of their significance are based on the requirements in 40 CFR 1508.27. Factors contributing to the intensity or severity of the impact include the following:

- The degree to which the action affects public health or safety;
- Unique characteristics of the geographic area such as proximity to cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas;
- The degree to which effects of the action on the quality of the human environment are likely to be highly uncertain or controversial;
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration
- Whether the action is related to other actions with individually insignificant, but cumulatively significant impacts;
- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed or eligible for listing on the NRHP, or may cause loss or destruction of significant scientific or cultural resources;
- The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA); and
- Whether the action threatens to violate a federal, state, or local law or requirements imposed for environmental protection.

Thresholds for determining impact significance are based on the applicable compliance standard. When feasible, these criteria correspond to federal- or

state-recognized criteria, and are determined using the associated standardized methods. In the absence of a compliance standard, the thresholds are based upon a federal- or state-recommended guidance or professional standards/best professional judgment.

4.1 Biological Resources

Under the ESA and AFI 32-7064, Chapter 7, *Threatened and Endangered Species Management*, it is the responsibility of the 45SW to determine whether actions authorized, funded, or otherwise carried out by those agencies may affect federally listed endangered, threatened, or proposed species. The 45SW initiated Section 7 Consultation with the USFWS and proposed to compensate for loss of scrub through restoration of 0.72 acres in the area where the modular building will be removed. The USFWS concurs with the AF that the proposed project is not likely to adversely affect the Florida scrub-jays, Eastern indigo snakes, Southeastern beach mice, and the gopher tortoises. In addition to compensation, clearing of vegetation will not be authorized during the scrub jay nesting season. The presence of the new facility will not impose stricter burn restrictions since the facility's purpose is administrative only.

4.1.1 Proposed Action

Specific requirements are identified in Table 4-1 that should be followed to maintain compliance during Proposed Action activities.

Table 4-1: Summary of Biology Resources Requirements

Law or Rule	Permit/Action(s)	Requirement	Agency or Organization
45SW Instruction 32-7001	Use low-pressure sodium lighting fixtures or shield high pressure sodium lights	Reduce the amount of exterior lighting visible from the beach during the sea turtle nesting season (1 April – 31 October) from 2100 to 0600 to reduce sea turtle hatchling mortality caused by disorientation.	45SW
Endangered Species Act	Consultation with USFWS, and if necessary, obtain and comply with biological opinions/incidental take permits, comply with existing T&E permits	Conserve ecosystems that support T&E species. Section 7 requires Federal agencies to insure that any action authorized, funded, or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat.	USFWS
EO 13112	Remove and control invasive species	Prevent the introduction of invasive species and provide for their control and minimize the economic, ecological, and human health impacts that invasive species cause.	DoD
Migratory Bird Treaty Act	Consult with USFWS as necessary and comply with applicable permits	Prohibits destruction of the eggs or nest of migratory birds without a permit.	USFWS

4.1.1.1 Vegetation

The USFWS considers CCAFS a core scrub jay area and highly valuable to the recovery of the species, regardless of the scrub condition. Project activities will occur in an area where native scrub habitat exists. Implementation of the Proposed Action will require the removal of 0.6 acres of this habitat. The 45 SW has completed Section 7 Consultation with the USFWS for loss of scrub habitat, and the subsequent compensation for this loss through restoration of 0.72 acres in the area where the modular building will be removed (Figure 4-1). However, this consultation was based on a previous site plan that placed the facility in the northwest corner of the parking lot. Because new QD Arcs were established for Area 59 on CCAFS, the site plan was slightly changed. New consultation is not required for the minor change in location because the footprint of the building remains the same and the amount and type of acreage to be impacted is identical. In addition, the enlargement of the stormwater system will not require any additional habitat to be removed.

The 45SW will realize a small net gain in scrub habit with this compensation plan, as well as beneficial results from the innovative habitat restoration techniques that typically yield an increase in and quality of herbage, legumes, browse from hardwood sprouts, and the creation of openings for feeding, caching, and travel. It is anticipated that land clearing may be restricted to outside scrub jay nesting season, which runs from March 1st until June 30th, to prevent adverse impacts to this species.

Any exotic, invasive vegetation encountered must be properly treated onsite in accordance with procedures outlined in the 2005 *Programmatic Environmental Assessment of Land Clearing Activities for Cape Canaveral Air Force Station, Patrick Air Force Base, Malabar Transmitter Annex, and Jonathan Dickinson Missile Tracking Annex*. All landscaping must be approved by 45 CES/CEV. Native, coastal, salt tolerant vegetation would be used as much as practicable.

Scrub Mitigation for Satellite Operations Support Facility (SOSF)



FIGURE 4-1: PROPOSED SCRUB MITIGATION FOR SOSF

4.1.1.2 Wildlife

Noise rather than the sight of machines appears to cause disturbance to wildlife. The combination of increased noise levels and human activity would likely cause temporary displacement of some animals that forage, feed, nest, or have dens within a 15-meter radius (or greater for more sensitive species) of noise sources. Direct mortality of slow-moving or nesting animals could occur because of project actions (e.g., excavation of burrows or removal of nests during clearing).

In order to avoid attracting wildlife to the work site, the contractor would keep the construction area, including storage areas, free from accumulation of waste materials or rubbish at all times. All waste materials would be hauled off at the end of each workday and disposed. Upon completion of the facility, the contractor would leave the work site in a clean and neat condition, satisfactory to the Contracting Officer.

4.1.1.3 Threatened and Endangered Species and Species of Special Concern

Under the ESA, it is the responsibility of the 45SW to determine whether actions authorized, funded, or otherwise carried out by those agencies may affect federally listed endangered, threatened, or proposed species. The 45SW consulted with USFWS on the Proposed Action, and the USFWS has concurred that no adverse effect to species are likely. Therefore, no further Section 7 consultation is necessary.

Florida Scrub Jay

Two populations of Florida scrub jays are documented to occur near the Proposed Action site as seen in Figure 4-1. However, Proposed Action activities are not anticipated to significantly affect these groups. Although 0.6 acres of scrub habitat will be permanently removed under the Proposed Action, the USFWS has concurred with the AF that the may be compensated through restoration of 0.72 acres in the area where the modular building will be removed. In accordance with Section 7 of the Endangered Species Act, the AF has initiated consultation with the U. S. Fish and Wildlife Service (USFWS). Although this consultation was based on a previous site plan that placed the facility in the northwest corner of the parking lot, new consultation is not required for the minor change in location because the footprint of the building remains the same and the amount and type of acreage to be impacted is identical.

Because Area 59 adheres to existing burn restrictions, no additional restrictions are anticipated to the scrub restoration program. The building is only administrative use and will not contain any sensitive payload.

Gopher Tortoise

However, scrub restoration activities have the potential to directly impact species such as gopher tortoises and eastern indigo snakes. Although never observed on CCAFS, slow moving gopher tortoises could be run over by heavy equipment performing cutting activities. Concerns regarding heavy equipment collapsing and entombing tortoises during routine cutting activities has been dismissed based on studies by the Fish and Wildlife Conservation Commission (FWCC) (Joan Berish, pers. comm.).

When activities are likely to disturb gopher tortoise burrows, CCAFS biologists will relocate tortoises to other suitable areas on CCAFS. Biologists would move tortoises no more than 2-3 weeks prior to ground disturbance to ensure tortoises do not move back and re-populate the area. All tortoise relocation will be completed in accordance with the Gopher Tortoise Relocation Permit (WR01103), issued to the USAF. This permit allows natural resource managers to relocate up to 150 tortoises during a three-year period. Trapping is conducted by experienced personnel and in accordance with required State permits for these types of activities. Although rare, tortoises have been injured or killed during backhoe operations. If a tortoise is injured during relocation activities, it will be transported immediately to a licensed local wildlife rehabilitator or veterinarian experienced in treating injured tortoises. If injured or killed, the FWCC will immediately be notified. Tortoises held overnight will be kept isolated from one another to prevent the spread of Upper Respiratory Tract Disease (URTD). Animals will be handled briefly and gently to reduce harm or stress to the animal. The USAF is required to submit a report for each relocation project.

If a proposed activity will occur near tortoise habitat, but individual burrows will not be disturbed, natural resource personnel will stake off the area that must be avoided and provide tortoise informational posters. These posters will educate contractors working in the area so they may learn the characteristics of a tortoise and burrow, as well as whom to contact if they should come across either during project activities.

Eastern Indigo Snake

Most indigo snakes leave construction areas once activities begin and any encountered are to be left alone and permitted to leave on their own. The only time indigo snakes may be relocated is during relocation of gopher tortoises. In accordance with the USAF Gopher Tortoise Relocation Permit, no more than one indigo snake encountered may be relocated. Should additional specimens of this species be encountered, the capture operation is suspended and the FWCC office in Tallahassee contacted for instructions.

Adverse impacts to Eastern Indigo Snakes that may be present will be minimized by providing the project manager, as well as construction personnel the 45 SW Indigo Snake Protection/Education Plan. An education sign will be posted on

site, informing personnel of the snake's appearance, protected status and who to contact if any are spotted in the area. Any Indigo snakes encountered during clearing activities will be allowed to safely leave the area on their own and any indigo encountered during gopher tortoise excavation will be safely moved out of the project area.

Southeastern Beach Mouse

The Proposed Action area is located in habitat that may be occupied by the Southeastern beach mouse. It is possible that the Proposed Action activities could create openings in the scrub that would not only create beach mouse habitat, but also create corridors in which this species could move between suitable habitats.

Sea Turtles

Studies have shown that light pollution has the potential to impact sea turtles. Female sea turtles go ashore to dig nests in the sand and lay eggs. When bright artificial light is present, females may avoid going to shore altogether, or they may become disoriented. Lighting associated with Proposed Action activities could be the source of this occurrence.

Sea turtle hatchlings, which almost invariably hatch at night, instinctively head toward light. Due to light pollution, hatchlings often head towards the light and away from the sea. This disorientation may expose the hatchlings to predation or other accidental death. To minimize the impacts to sea turtles from the lighting, all exterior lighting proposed for this project will be in accordance with the 45SW Instruction 32-7001, *Exterior Lighting Management* dated 1 April 2003. Additionally, a Light Management Plan will be required for the facility.

4.1.2 No Action Alternative

Under the No Action Alternative, the SOSF would not be constructed, removal of the scrub habitat would not occur, and scrub compensation/restoration would not occur. No impacts to biological resources would be anticipated as a result of the No Action Alternative.

4.2 Conflicts with Federal, State, or Local Land Use Plans, Policies, and Controls

The Proposed Action alternatives would have no impact on existing land use and presents no conflicts with Federal, regional, or local land use plans, policies, or controls.

4.3 Energy Requirements and Conservation Potential

Existing energy sources are considered adequate to meet the requirements of the Proposed Action.

4.4 Natural or Depletable Resource Requirements and Conservation Potential

Other than the use of vehicle fuels for construction activities, the Proposed Action requires no significant use of natural depletable resources.

4.5 Irreversible or Irretrievable Commitment of Resources

Although the Proposed Action would result in some irreversible and irretrievable commitment of resources such as fuel and labor, this commitment of resources is not significantly different from that necessary for regular activities taking place on the Installation in general.

4.6 Adverse Environmental Effects that Cannot be Avoided

Adverse environmental effects from the Proposed Action that cannot be avoided include construction-related emissions of fugitive dust and exhaust products; temporary displacement of wildlife during construction due to noise and construction activities; some destruction of existing vegetation; and sediment runoff into surrounding areas during construction activities. However, through implementation of the program actions and mitigation measures described within this document, these effects would be minimized to a “not significant” level of impact.

Under the Proposed Action, a 0.6 acres loss of scrub habitat would occur. However, consultation with the USFWS proposed to compensate for loss through restoration of 0.72 acres. Under this Alternative, CCAFS would gain scrub habitat.

4.7 Relationship Between Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

The Proposed Action would construct the SOSF and remove 0.6 acres of scrub habitat. However, this loss will be compensated with 0.72 acres of scrub restoration.

4.8 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Environmental Justice analysis need be applied only to adverse environmental impacts (USAF, 1997). Based on preliminary guidance provided by the Federal Interagency Working Group on Environmental Justice, adverse may be defined as "having a deleterious effect on human health or the environment that is significant, unacceptable, or above generally accepted norms." Adverse human health effects include bodily impairment, infirmity, illness, or death. Adverse environmental effects may include ecological, cultural, human health, economic, or social impacts when interrelated to impacts on the natural or physical environment.

The Proposed Action area is not located adjacent to minority populations or low-income population centers, and indirect impacts to such communities located in the surrounding areas were not identified during the analysis of the Proposed Action. Therefore, the Proposed Action would not result in disproportionately high or adverse human health or environmental effects on minority or low-income populations. The Proposed Action alternatives would not substantially affect human health or the environment and would not exclude persons from participation, deny persons the benefits, or subject persons to discrimination because of their race, color, or national origin.

4.9 Cumulative Impact Summary

A "cumulative impact" is an impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time. The following proposed projects identified by SGS Master Planning were considered in the cumulative impacts analysis for the Proposed Action area:

Project 1 – Construction of an Administrative Campus Area on the south side of Pier Road. This project would result in the loss of approximately 50 acres of potential habitat for state and federally listed species. Construction of these facilities may commence in 2007.

Project 2 – Construction of a Substation for the proposed Eastern Processing Facility on the west side of Phillips Parkway and north of the Southwest Cable

Terminal Building. This project would result in the loss of approximately three acres of habitat. Construction of this facility is planned for the year 2006.

Project 3 – Construction of a new Eastern Processing Facility to support processing of National Reconnaissance Office (NRO) payloads. Construction is planned for the year 2005. This facility is proposed on the corner of Samuel C. Phillips Parkway and Lighthouse Road.

A preliminary evaluation of these projects suggests that potential cumulative adverse impacts would occur for biological resources. The Proposed Action would result in the permanent loss of approximately 0.6 acres of Florida scrub jay habitat. However, this loss would be compensated through the restoration of 0.72 acres of scrub habitat. Project 2 would result in the permanent loss of up to 59 acres of scrub jay habitat, which has undergone restoration under scrub restoration guidelines. Project 3 would result in the permanent loss of 45 acres of scrub jay habitat.

Additionally, no further burn restrictions will be implemented to the Scrub Restoration Program as a result of the Proposed Action because the new facility will only handle administrative duties and does not have any sensitive payloads within the building.

When evaluated together, the Proposed Action, Project 2 and Project 3, would result in a reduction of available breeding habitat and reduction in the availability of scrub habitat for restoration. Thus, cumulative adverse impacts on the federally threatened Florida scrub-jay would occur. However, through the formal Section 7 consultation with the USFWS, it was determined that cumulative impacts do not apply in this instance.

5.0 Conclusion

The Proposed Action would result in the construction of a permanent facility to support the 45SW's operation mission and routine mission of the AF Command to process and launch satellites. The permanent technical operations support facility would hold approximately 180 Air Force and DoD contractor personnel who will perform time critical data collection/reduction, anomaly resolution, computer simulation, technical data processing, quality control functions, logistic accounting, aerospace engineering, safety engineering, and security management of these multiple programs. Close working proximity to satellite processing facilities is essential to enable personnel to effectively perform these functions for satellite payloads prior to their encapsulation and delivery to the launch vehicle.

Under the Proposed Action, it is required that 0.6 acres of scrub habitat be removed for the facility construction. The federally listed species Florida scrub jay, Eastern indigo snake, and the Southeastern beach mouse, and the gopher tortoise, a state listed species of special concern, are located within the scrub habitat. Precautions will be taken to minimize any effects to the listed species, and 0.72 acres of scrub habitat will be restored

If the No Action Alternative is implemented, personnel supporting GSS IIF and SBIRS satellite processing will continue to operate in temporary facilities at scattered locations necessitating lengthy travel time and processing delays. Work delays increase government expenditures as the costs are accounted for by AF and DoD contractors. The AF would be forced into an expensive short-term solution to lease or purchase another modular facility at a cost of approximately \$900,000 and replace the existing modular facility at an additional cost of \$900,000.

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6.0 Documentation Cited

32 CFR 989, 2003. *Environmental Impact Analysis Process (EIAP)*. Headquarters AF. Washington D.C.

AFI 32-7064, 2004. *Integrated Natural Resources Management*, Headquarters USAF. Washington D.C., 17 Sept.

Endangered Species Act, 1973. Pub. L. No.93-205, 81 Stat. 884 (Dec. 28, 1973) (current version at 16 USC. 1531-1543 (1982)).

Executive Order 13112, 1999. *Invasive Species*.

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USAF, 2001. *Integrated Natural Resources Management Plan*, Cape Canaveral Air Force Station, Florida. U.S. Air Force, 45th Space Wing. Cape Canaveral Air Force Station, FL.

USAF, 2005. *Programmatic Environmental Assessment for Land Clearing Activities for Cape Canaveral Air Force Station, Patrick Air Force Base, Malabar Transmitter Annex, and Jonathan Dickinson Missile Tracking Annex*.

United States EPA, 1971. Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, NJID, 300 1, December 31, 1971.

USEPA, 1971. Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, NJID, 300 1, December 31, 1971

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7.0 List of Preparers

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APPENDIX A

AF FORM 813

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REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS		Report Control Symbol RCS: DBEH 92-3101
INSTRUCTIONS: Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).		
SECTION I - PROPONENT INFORMATION		
1. TO (Environmental Planning Function)	2. FROM (Proponent organization and functional address symbol)	2a. TELEPHONE NO.
45 CES/CEV	45 CES/CEL	853-0929
3. TITLE OF PROPOSED ACTION		
Construct Satellite Operations Support Facility		
4. PURPOSE AND NEED FOR ACTION (Identify decisions to be made and need date)		
The purpose of the action is to construct a permanent facility on Cape Canaveral Air Force Station (CCAFS) to support the 45SW's operational mission and routine mission of the Air Force Space Command to process and (cont. on page 2)		
5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.)		
Construct a permanent, two-story 25,500 square foot concrete block operations support facility with office space, secure conference area, data storage area, and communications room. Included are all necessary utilities. (cont. on page 2)		
6. PROPONENT APPROVAL (Name and Grade)	6a. SIGNATURE	6b. DATE
Theodore Schommer, GS-12	//Signed//	20050912
SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)		
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)	<input type="checkbox"/> + <input checked="" type="checkbox"/> 0 <input type="checkbox"/> - <input type="checkbox"/> U	
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)	<input type="checkbox"/> + <input checked="" type="checkbox"/> 0 <input type="checkbox"/> - <input type="checkbox"/> U	
9. WATER RESOURCES (Quality, quantity, source, etc.)	<input type="checkbox"/> + <input type="checkbox"/> 0 <input type="checkbox"/> - <input checked="" type="checkbox"/> U	
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, etc.)	<input checked="" type="checkbox"/> + <input type="checkbox"/> 0 <input type="checkbox"/> - <input type="checkbox"/> U	
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)	<input type="checkbox"/> + <input type="checkbox"/> 0 <input type="checkbox"/> - <input checked="" type="checkbox"/> U	
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, flora, fauna, etc.)	<input type="checkbox"/> + <input type="checkbox"/> 0 <input type="checkbox"/> - <input checked="" type="checkbox"/> U	
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)	<input type="checkbox"/> + <input checked="" type="checkbox"/> 0 <input type="checkbox"/> - <input type="checkbox"/> U	
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)	<input type="checkbox"/> + <input checked="" type="checkbox"/> 0 <input type="checkbox"/> - <input type="checkbox"/> U	
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)	<input type="checkbox"/> + <input checked="" type="checkbox"/> 0 <input type="checkbox"/> - <input type="checkbox"/> U	
16. OTHER (Potential impacts not addressed above.)	<input type="checkbox"/> + <input checked="" type="checkbox"/> 0 <input type="checkbox"/> - <input type="checkbox"/> U	
SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION		
17. <input type="checkbox"/> PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # ; OR <input checked="" type="checkbox"/> PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.		
18. REMARKS		
See page 2.		
19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)	19a. SIGNATURE	19b. DATE
E. ALEXANDER STOKES III, GS-14 Chief, Environmental Flight		

AF FORM 813, AUG 93 (EF-V1) (M.S. Word 97 form)

THIS FORM CONSOLIDATES AF FORMS 813 AND 814.
PREVIOUS EDITIONS OF BOTH FORMS ARE OBSOLETE.

PAGE 1 OF 3 PAGE(S)

AF FORM 813, AUG 93, CONTINUATION SHEET

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Page 2
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4. Purpose and Need for Action (cont.)

launch satellites. This project is required to support existing and new satellite processing operations for Global Positioning System IIA, IIR, IIF, Defense Satellite Communication System (DSCS II), Space Missile Tracking System (SMTS), the Space Based Infra-red System (SBIRS) and future generations of military satellites. A permanent technical operations support facility is required for approximately 180 Air Force and DoD contractor personnel who will perform time critical data collection/reduction, anomaly resolution, computer simulation, technical data processing, quality control functions, logistic accounting, aerospace engineering, safety engineering and security management of these multiple programs. Close working proximity to satellite processing facilities is essential to enable personnel to effectively perform these functions for satellite payloads prior to their encapsulation and delivery to the launch vehicle.

The Air Force has consolidated satellite processing facilities within a vicinity known as the Satellite Processing Area or Area 59. The recent trend toward launching smaller DoD satellites has made this one of the busiest satellite processing areas in the world. Currently, technical personnel conduct business from multiple sites; some facilities are located as far away as three miles from Area 59. The separation of these facilities increase response times for contractor personnel, handicapping the need to support 60-day or less launch calls and increases chargeable costs to the government. Between 1987 and 1995, the Air Force and launch contractors expended over \$3.2 million for leases of temporary facilities to support processing of GPS IIA and DSCS III satellite systems. The temporary facilities have since been removed per SAF/IEI direction. In 1995, the Air Force (SMC, Los Angeles Air Force Base) purchased a 12,000 square foot modular facility for \$800,000 accommodating up to 90 personnel supporting GPS IIR and DSCS III satellite programs. During the FY 2002/2003 time frame, 90 additional contractor and Air Force personnel needed space for the GPS IIF and SBIRS programs. The new programs overlapped with the ongoing programs and facility requirements for satellite support personnel more than doubled. The new satellites will be launched on future Delta, Atlas and EELV medium launch vehicles beyond the year 2010. No existing permanent facilities are available to support this critical long-term mission. Additionally, Range Safety will not allow permanent operations in the existing satellite processing facilities due to explosive Quantity/Distance (QD) criteria.

5. Description of Proposed Action and Alternatives (cont.)

mechanical and electrical systems, communications, fire detection/alarm system, pavements and access roads. Dismantle and remove one modular building. The proposed location is just southwest of Facility 55893 at Area 59 (see attached site plan). Construction of the facility will require the permanent removal of approximately 0.5 acres of overgrown oak scrub habitat.

ALTERNATIVES:

Construct Facility at Alternate Site – The proposed facility must be located near existing satellite processing facilities, but outside explosive QD clear zones. An area exists approximately 400' to the east; however, safety concerns associated with personnel crossing busy road to access the parking lot prevents construction at this site. Additionally, several lines of site from radar and camera sites to Launch Complex 36 run through this area, which precludes construction at this site as well.

No Action – Personnel supporting GSS IIF and SBIRS satellite processing will continue to operate in temporary facilities at scattered locations necessitating lengthy travel time and processing delays. Contractors have been forced to work overtime shifts to meet launch deadlines due to these inefficiencies. Work delays increase government expenditures as the costs are accounted for by Air Force and DoD contractors. The Air Force will be forced into an expensive short-term solution to lease or purchase another modular facility at a cost of approximately \$900,000 and replace the existing modular facility at an additional cost of \$900,000.

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18. Remarks

The Contractor and all Subcontractors involved in this project must comply with Air Force Affirmative Procurement (AP) requirements. AP is the purchase of environmentally friendly products and services (e.g., products made from recycled or recovered materials). Federal agencies, their contractors and subcontractors are required, whenever practicable, to maximize the purchase of materials containing minimum recycled or recovered materials content found on the list of "EPA Designated Guideline Items" according to RCRA 6002 and Executive Order 13101

(<http://www.afce.gov/eo13101/13101.htm>). Prior to project closeout, the design engineer and the contractor must provide a report that describes the materials and quantities specified/used, or must provide a justification as to why designated guideline items were not utilized. AP requirements must also take consideration of life cycle costing, i.e., the cost of a product, including capital, installation, operating, maintenance, and disposal costs over the lifetime of that product.

Prior to and during construction, implement all erosion and sediment control measures (Best Management Practices) required to retain sediment on-site and to prevent violations of state water quality standards. Implement best management practices as necessary and correct any erosion or shoaling causing adverse impacts to water resources. Additionally, erosion and sediment control measures shall be initiated, as soon as practicable, in disturbed portions of the site where construction activities have permanently ceased or are temporarily on hold for at least seven days.

Projects creating 9,000 square feet or more of total impervious surface (the sum of building and parking area) will require an Environmental Resources Permit.

An Environmental Resource Permit (ERP) will be required for canal/ditch crossings. Jack and bore under canals would be the preferred method and would not require an ERP permit.

Coverage under an FDEP Construction General Permit must be sought by the operator of a construction activity that:

- Will disturb one acre or greater, or
 - Will disturb less than one acre but is part of a larger common plan of development or sale whose total land disturbing activities total 1 acre or greater (or is designated by the NPDES permitting authority);
- AND
- Will discharge storm water runoff from the construction site into a municipal separate storm water sewer system (MS4) or waters of the United States.

If the above criteria apply, A Notice of Intent for Storm Water Discharges Associated with Construction Activity under a NPDES General Permit must be submitted to FDEP, through the 45 CES/CEV office. When all construction activities have been completed, a Notice of Termination must be submitted to FDEP through the CEV office. Contact the Environmental Support Contractor at 853-6938 for information.

Solid waste must be managed in accordance with the instructions set forth in the specifications of the contract. The Air Force supports the recycling of Construction and Demolition materials to the largest extent possible. If the contractor is directed to dispose of construction & demolition and/or asbestos containing materials in the CCAFS landfill, all requirements specified in the CCAFS Landfill Operations Plan must be met. The project contract monitor must make all arrangements with the landfill operator prior to any disposal activities, and must complete and sign a "Landfill Disposal Verification Form." No waste will be accepted prior to the completion of this form. Contact the CCAFS Landfill at 853-4672 for additional information. For off-site disposal activities, ensure that all materials are secured to prevent safety hazards during transport.

The project area may support gopher tortoises, a state listed species of special concern. All tortoises/burrows located in the project areas that have the potential to be impacted by project activities must be relocated in accordance with permit requirements. Contact the 45 CES/CEVP at 853-6822 for guidance related to gopher tortoise relocation.

Do not dispose of any spoil (excess soil) in vegetation. Contact 45 CES/CEVP at 853-6822 to coordinate staging of equipment or soil.

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The proposed action has the potential to impact threatened and endangered species; therefore, in accordance with Section 7 of the Endangered Species Act, consultation with the U. S. Fish and Wildlife Service (FWS) must be completed by the Air Force prior to initiation of construction.

To reduce adverse impacts to threatened and endangered sea turtles from artificial lighting operated on CCAFS, all exterior lighting proposed for this project must be in accordance with the 45th Space Wing Instruction 32-7001, *Exterior Lighting Management*, dated 1 April 03.

Do not dispose of any spoil (excess soil) in vegetation. Contact 45 CES/CEVP at 853-6822 to coordinate staging of equipment or soil.

Prior to any digging, an Excavation Permit will be required. To obtain an excavation permit, contact SGS Mission Support, Excavation Administrator, at 861-4453. Additionally, an Air Force Form 103, BCE Work Clearance Request, will be required. Contact the Cape Superintendent for guidance on the use of AF Form 103.

The proposed activities may require/generate small quantities of hazardous materials/wastes. All wastes generated by the contractor must be managed in accordance with all federal, state, local and installation regulations and directives. The contractor will be responsible for sampling all wastes to determine whether they are hazardous or non-hazardous. Results of laboratory analyses will be provided to the Contracting Officer. All containers utilized for management of wastes must be new and meet the Department of Transportation's performance-oriented packaging requirements. All containers must be labeled to accurately reflect the contents. All other requirements identified in Appendix F of OPLAN 19-14 must be met. The contractor will assume all liabilities for improper waste disposal. The responsibility for off-site disposal of solid non-hazardous waste also lies with the contractor. Management of hazardous waste must be completed in accordance with 40 CFR 260-279. All Air Force hazardous waste is to remain on the installation and will be shipped off-site by the Air Force under their EPA identification number.

All 45 SW properties are located in areas that are in attainment for all criteria air pollutants; therefore, a conformity determination is not required.

The proposed project has the potential to adversely impact CCAFS environmental resources and does not qualify for a Categorical Exclusion (CATEX), as defined in 32 CFR 989, Appendix B. Therefore, further environmental analysis is required (e.g., Environmental Assessment or Environmental Impact Statement).

alc
9-Sep-04

PAGE 4 OF 4 PAGE(S)

APPENDIX B

Agency Consultations

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DEPARTMENT OF THE AIR FORCE
45TH SPACE WING (AFSPC)



FWS Log No. 41910-2006-I-0094

The proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) This finding fulfills the requirements of the Act.

MEMORANDUM FOR UNITED STATES DE
U. S. FISH AND WIL
6620 SOUTHPOINT
JACKSONVILLE FL
ATTENTION: ANN M

Stephen L. Bittner
David L. Hankla
Field Supervisor

11/21/2005
/Date

FROM: 45 CES/CEV
1224 Jupiter Street, MS 9125
Patrick AFB FL 32925-3343

SUBJECT: Informal Section 7 Consultation for Construction and Operation of a
Satellite Operations Support Facility (SOSF), Cape Canaveral Air Force
Station (CCAFS), Florida

1. The 45th Space Wing (45SW) proposes to construct a two-story facility approximately 32,400 square feet in size on CCAFS (site plan attached). The facility is proposed to be constructed just southwest of Facility 55893 at Area 59 on the southeastern end of Compartment 68. The facility's purpose will be to consolidate satellite processing support personnel currently occupying two modular buildings into one facility. Upon completion of the facility, one of the modulars will be removed. Figure 1 shows the proposed location of the new facility, as well as the present location of the modular building to be removed.

2. The Air Force consulted on this project in 1994 (reference FWS Log No: 4-1-94-537D) (attached); however, at that time the site was located approximately 400' to the east (Figure 1). The original site would have resulted in the loss of approximately 0.25 acres of overgrown scrub. Due to lack of funding at the time, the project was put on hold. Now that funds have become available, the project has become active once again. The proposed site has been moved due to safety concerns related to personnel crossing a busy road to access the parking lot, as well as the presence of lines of site from radar and camera sites to Launch Complex 36.

3. The new proposed site will result in the loss of approximately 0.5 acres of overgrown scrub located in Compartment 68. Compartment 68 consists of 72 acres, of which 35 were cut and burn in 2003. The majority of the area where the facility will be constructed consists of overgrown oak scrub (see attached photo). During the 2005 census, one group of Florida Scrub-jays (*Aphelocoma coerulescens*) was observed in the area just to the west of the proposed facility (Figure 1). Additionally, it is possible the habitat could support the Eastern Indigo Snake (*Drymarchon corais couperi*). It is doubtful that the Southeastern Beach Mouse (*Peromyscus polionotus niveiventris*)

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is present in the area due to the thickness of the vegetation; however, it is possible it could occupy the grassy edges, although no burrows were observed during site walk downs in August.

4. Although a small amount of potential scrub jay habitat will be permanently lost, it is not expected to have an adverse impact to the species. To compensate for this loss, the 45SW proposes to restore .72 acres in the area where the modular building will be removed. To prevent direct impacts to jays, clearing will not be authorized during the scrub-jay nesting season if any nests are known to occur in or near the proposed site. The project manager will be advised to clear the area prior to the beginning of the nesting season to prevent potential project delays due to nesting jays. The presence of the new facility will not impose stricter burn restrictions since the facility's purpose is administrative only.

5. Other than the loss of 0.5 acres of habitat, no other adverse impacts to indigo snakes are expected. The 45SW Indigo Snake Protection/Education Plan will be presented to the project manager and construction manager and personnel. An educational sign will be displayed at the site, informing personnel of the snake's appearance, protected status, and who to contact if any are spotted in the area. Any indigo snakes encountered during clearing activities will be allowed to safely leave the area on their own. Furthermore, any indigo encountered during gopher tortoise burrow excavation, if required, will be safely moved out of the project area.

6. Impacts to beach mice are expected to be negligible since no burrows were observed at the site.

7. Based on our review of the project and site visits conducted by 45SW biologists, the AF believes the proposed project is not likely to adversely affect the Florida scrub jay, eastern indigo snake or southeastern beach mouse.

8. Please review the proposed project in accordance with Section 7 of the Endangered Species Act and provide a response to this office at your convenience. POC for this action is Ms Angy Chambers, 45 CES/CEVP, 321-853-6822 or E-mail, angy.chambers@patrick.af.mil.


ROBIN L. SUTHERLAND
Chief, Environmental Planning

Attachments:

1. SOSF Site Plan
2. Figure 1
3. 1994 FWS Consultation Letter
4. Photo of Proposed Site



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Colleen M. Castille
Secretary

February 22, 2006

Ms. Angy L. Chambers
Department of the Air Force
45 CES/CEV
1224 Jupiter Street, MS 9125
Patrick AFB, FL 32925-3343

RE: Department of the Air Force – Environmental Assessment for the Satellite Operations
Support Facility on Cape Canaveral Air Force Station – Brevard County, Florida.
SAI # FL200602221940C

Dear Ms. Chambers:

Florida State Clearinghouse staff, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has reviewed the referenced final draft environmental assessment (EA).

The Florida Department of Environmental Protection (DEP) concurs with the U.S. Air Force's finding of no significant impact and notes that the Air Force will consult with St. Johns River Water Management District and DEP staff to obtain the required state permits for the proposed construction activities.

Based on the information contained in the final draft EA, minimal project impacts, and proposed scrub mitigation project, the state has determined that the proposed federal activity is consistent with the Florida Coastal Management Program (FCMP). The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting stage.

Thank you for the opportunity to review the subject document. Should you have any questions regarding this letter, please contact Ms. Lauren P. Milligan at (850) 245-2170.

Sincerely,

Sally B. Mann, Director
Office of Intergovernmental Programs

SBM/lm

"More Protection, Less Process"

Printed on recycled paper.